09/812,971

APPENDIX A – CLEAN LISTING OF CLAIMS

1.   (currently amended) A method for allocating MCU ports for a multipoint network event, said method comprising:

receiving an allocation request for the multipoint network event, said request comprises a maximum number of MCU ports for the multipoint network event; and

determining electronically the number of MCU ports to allocate at the start of the multipoint network event, wherein said determination involves calculation comprising said maximum number of MCU ports and the start MCU ports allocation number is less than or equal in value to the maximum MCU ports number.

2.   (currently amended) The method of claim 1 wherein the allocation request is transmitted through a plurality of MCUs.

3.   (currently amended) The method of claim 1 wherein the allocation request is transmitted through a common channel signaling interface.

4.   (original) The method of claim 1 wherein the step of receiving the allocation request originates as an external allocation request.

5.   (previously presented) The method of claim 1 wherein the step of determining comprises the step of calculating:

$$R = [(R_{MAX})(R_{SP})]_{R_{SM}}$$

where: R = said Number of Ports to start

R_{MAX} = Maximum Ports

R_{SP} = Configurable Start Ports Percentage

R_{SM} = Configurable Minimum Start Ports

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6. (currently amended) A method for time varying allocation of MCU ports during a multipoint network event, said method comprising:

determining the number of MCU ports to allocate for the start of the multipoint network event; and

at each of a plurality of modeling intervals during the multipoint network event, dynamically adjusting the number of allocated MCU ports based on users actually in the multipoint network event and based on a statistics algorithm using probability values related to future or historical use of MCU ports, wherein the probability values are dynamically modified.

7. (previously presented) The method of claim 6 wherein the step of determining comprises the step of calculating:

$$R = [(R_{MAX})(R_{SP})]_{R_{SM}}$$

where: R = said Number of Ports to start

R_{MAX} = Maximum Ports

R_{SP} = Configurable Start Port Percentage

R_{SM} = Configurable Minimum Start Ports

8. (previously presented) The method of claim 6, wherein the step of adjusting comprises the step of calculating:

$$R_j = \left[\sum_{events} \left((R_{actual} + \frac{P_j}{1-S}) | R_{MAX} \right) \right] \Big|_{\left(\sum_{events} R_{actual} \right)+1}$$

where:

R_j = Number of Ports at a modeling interval j of said plurality modeling intervals

R_{actual} = Number of Ports actually used

R_{MAX} = Maximum Ports

$events$ = Number of multipoint network events

P_j = Probability Value at each of said plurality of modeling intervals j

S = Confidence Factor

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9.   (currently amended) A method for allocating resources for a multipoint network event, said method comprising:

obtaining available MCU capacity in a plurality of MCUs;

receiving an allocation request from an allocation requestor for the multipoint network event;

determining the number of resources to allocate to start the multipoint network event, wherein said determination comprises calculating: $R = [(R_{MAX})(R_{SP})]_{R_{SM}}$, where R = said number of resources to start, R_{MAX} = maximum resources, R_{SP} = configurable start resource percentage, and R_{SM} = configurable minimum start resources;

allocating the number of resources to at least one MCU;

debiting the allocated resources from the available MCU capacity; and

directing inbound users to the at least one MCU for participation in the multipoint network event.

10.   (canceled)

11.   (currently amended) The method of claim 9 wherein the allocation request is transmitted through a plurality of MCUs.

12.   (currently amended) The method of claim 9 wherein the allocation request is transmitted through a common channel signaling interface.

13.   (original) The method of claim 9 wherein the step of receiving the allocation request originates as an external allocation request.

14.   (currently amended) The method of claim 9 further comprising:

at each of a plurality of modeling intervals, dynamically adjusting the number of resources based on the number of inbound users actually in the

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multipoint network event and based on a statistics algorithm using probability values related to future or historical use of MCU capacity, wherein the probability values are dynamically modified.

15.   (original) The method of claim 14 wherein the step of adjusting comprises the step of calculating:

$$R_j = \left[\sum_{events} \left((R_{actual} + \frac{P_j}{1-S}) \lfloor R_{MAX} \rfloor \right) \right] \Big|_{\left(\sum_{events} R_{actual} \right)+1}$$

where:

R_j = Number of Resources at a modeling interval j of said plurality modeling intervals

R_{actual} = Number of Resources actually used

R_{MAX} = Maximum Resources

$events$ = Number of multipoint network events

P_j = Probability Value at each of said plurality of modeling intervals j

S = Confidence Factor

16.   (original) The method of claim 15 wherein the step of adjusting adjusts the number of resources at each modeling interval (j) based on a configurable value for S.

17.   (original) The method of claim 15 wherein the step of adjusting adjusts the number of resources at each modeling interval (j) is based on a self-tuning value for P_j.

18.   (original) The method of claim 17 wherein the self-tuning value for P_j comprises the step of calculating:

$$P_j = \frac{\sum_{i=1}^{m} (w_i)(\overline{R}_{i,j})}{\sum_{i=1}^{m} w_i}$$

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where: $\overline{R}_{i,j} = \dfrac{R_j}{\sum\limits_{j=1}^{n} R_j}$ = normalized resource accumulation

w_i = the counted number of events at tuning interval i

R_j = the number of resources that have become utilized during modeling interval j

n = the number of modeling intervals (j) in use

m = the number of tuning intervals (i) in use

19. (currently amended) A method for allocating MCU ports for a plurality of multipoint network events, said method comprising:

obtaining available MCU capacity in a plurality of MCUs;

receiving allocation requests from allocation requestors for the plurality of multipoint network events;

determining based on each of said plurality of received allocation requests, the number of ports to allocate to start each of the multipoint network events;

allocating the number of ports to at least one MCU of said plurality of MCUs for each of the multipoint network events; and

at each of a plurality of modeling intervals during each multipoint network event, dynamically adjusting the number of ports based on inbound users actually in the multipoint network event and based on a statistics algorithm using probability values related to future or historical use of MCU ports, wherein the probability values are dynamically modified.

20. (previously presented) A method for tuning the allocation of MCU resources for multipoint network events, said method comprising:

counting the number of multipoint network events that have been accumulated within at least one predetermined tuning interval,

normalizing MCU resources actually utilized during each multipoint network event in each of the at least one predetermined tuning interval,

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determining a probability value for future use of MCU resources for an
upcoming multipoint network event based on the steps of counting and
normalizing.

21.   (original) The method of claim 20 wherein the step of normalizing accumulates the
number of resources at predetermined modeling intervals during each multipoint event.

22.   (original) The method of claim 20 wherein the predetermined tuning interval is at
least three orders of magnitude in time greater than the predetermined modeling interval.

23.   (original) The method of claim 22 wherein the tuning interval is at least a day and
the modeling interval is at least a minute.

24.   (new) The method of claim 8, wherein the value for P_j comprises calculating:

$$P_j = \frac{\sum_{i=1}^{m}(w_i)(\overline{R}_{i,j})}{\sum_{i=1}^{m}w_i}$$

where: $\overline{R}_{i,j} = \dfrac{R_j}{\sum_{j=1}^{n}R_j}$ — normalized resource accumulation

   w_i = the counted number of events at tuning interval i

   R_j = the number of resources that have become utilized during modeling
       interval j

   n = the number of modeling intervals (j) in use

   m = the number of tuning intervals (i) in use

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